

TOP SECRET STRAP 1



Real-Time Regional Gateway (RT-RG)



RT-RG: REAL-TIME
REGIONAL GATEWAY

Bagram Airbase, Afghanistan - AF1



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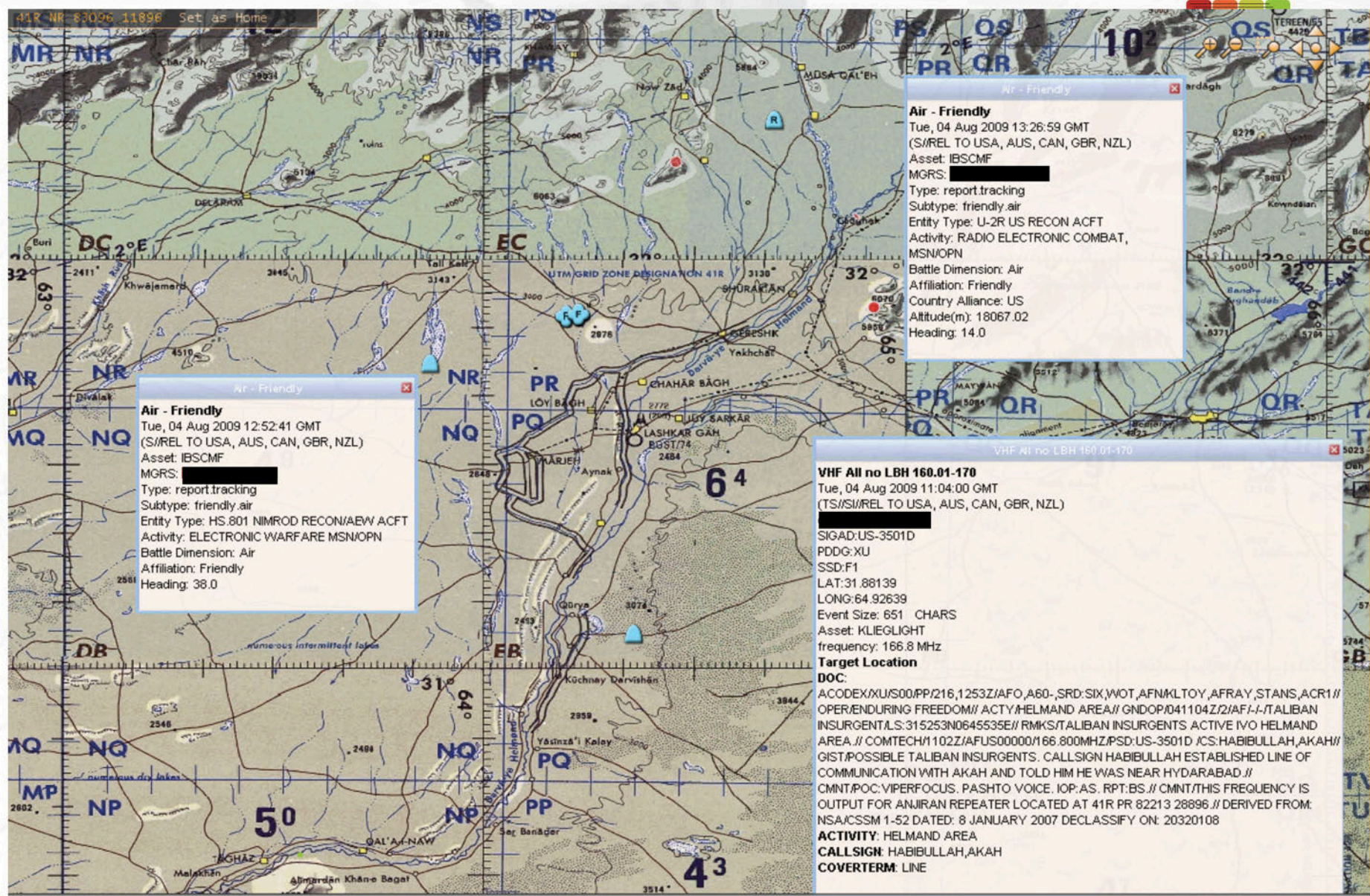
What is RT-RG?

- NSA's Real-Time Regional Gateway (formerly RT-10)
- *“RT-RG extends NSA analysis, processing, and exploitation power to tactical users and the national security enterprise enabling SIGINT analytic results to be produced and delivered in a matter of seconds and minutes, not hours and days.”*
- Suite of integrated analyst applications...
...designed & optimised for time-sensitive SIGINT support to tactical military operations
- Multiple instances (Iraq, Afghan, Korea, others), data specific to theatre



Applications

- **GOLDMINER: events/geo fusion (GSM + VOICESAIL + VHF/UHF)**
 - Managing tracking of multiple targets
 - Follow the targets irrespective of technology
 - Data from 320+ different collectors (strategic, tactical, ground-based, airborne, ...)
 - Limited retention period (IQ 45 days, AF/PK 60 days)
- **GEOT: visualisation of events data; integration with mapping / imagery**
 - Updates 'pushed' at analysts
- **SHARKFINN: target 'enrichment' (CELLEX, gists, tactical questioning)**
 - Entity extraction to find new selectors of interest
- **Real-Time Alert Manager: does what it says!**
- **SORTINGLEAD: Pattern of Life / target discovery**



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GeoT - Connected - Mozilla Firefox

File Edit View History Bookmarks Tools Help

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GeoT CONNECTED

Welcome, [REDACTED] Logout
Low Bandwidth | Static Mode

Watched Targets

Manage Targets (Bulk Upload)

Enter a Target Name:

Enter a Group Name:

150 Events Clear Options

(17:00:13) CJSOTF-A / CST-20 TARGET LIST:OBJ JEBBA

Mon, 13 Jul 2009 12:20:55 GMT
(TS//SI//REL TO USA, AUS, CAN, GBR, NZL)

SIGAD:USJ-759
PDDG:AL
SSD:T2
Asset: VOICESAIL
LAT:33.15206 LONG:65.5806
Selectors:

42S UB 94299 07946 Set as Home

7Z 11:48Z 11:49Z 11:50Z 11:51Z 11:52Z 11:53Z 11:54Z 11:55Z 11:56Z 11:57Z

42S UB 94299 07946 Set as Home

FITZ RTRG AIRHANDLER TIPPERS:158.01-164
Airhandler
Mon, 13 Jul 2009 09:49:00 GMT
(TS//SI//REL TO USA, AUS, CAN, GBR, NZL)

SIGAD:US-3238HAF
PDDG:XQ
SSD:OR
LAT:32.69806
LONG:67.80889
Asset: AIRHANDLER
frequency: 160.12 MHz

Target Location

GIST: WATANYAR ATTEMPTED TO CALL UP ZULFIKAR AND FRIENDS OF [REDACTED] RESPONDED. WATANYAR THEN TOLD [REDACTED] TO CALL [REDACTED] MOBILE PHONE AND LET [REDACTED] KNOW THAT WATANYAR WILL BE GOING TOWARD [REDACTED] SIDE. [REDACTED] LATER CALLS WATANYAR AND CONDUCTS COMMS. CALL SIGIL WATANYAR
ACTIVITY: GHAZNI AREA INSURGENTS
COVERTERM: FRIENDS

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Done

(4) Microsoft Office PowerPoint



Why does GCHQ care?

- GCHQ requirements to access RT-RG driven by GREMIO (Afghan, now PK + IN)
- RT-RG solves a major business problem
- Actionable (tactical) SIGINT taking too long to reach military customers
 - Limits GCHQ's impact and effectiveness (force protection, support to SF)
 - Analyst / GCO workload
 - Data 'all over the place' (GCHQ and 2nd Party systems)
 - Lots of manual / "cerebral fusion" to answer simple questions (e.g. "is my target using GSM, VOICESAIL, or VHF today?")
 - SMO requires answers in seconds & minutes, not hours & days
- Timely delivery of UK data seen as major UKUSA contribution
 - Some GCHQ events/geo data now delivered in ~5s versus ~15mins



So what? The benefits to GCHQ...

- **Faster delivery and presentation of events / geo to the analyst**
 - Enables faster provision of actionable SIGINT to military customers
 - Enables optimisation of other SIGINT capabilities (e.g. IMMERGO)
- **Analyst effort savings and efficiency**
 - 'Push' model & fused data saves time
 - ~60% time and effort saving to deliver 'SIGINT trigger' for an operation
- **Access to events/geo data not accessible through other applications**
- **Early GCHQ buy-in to an NSA roadmap**
 - Expansion from OEF (HERRICK) to wider AF/PAK interests (CT interests)
 - Investment in C-IED analysis features
 - Influence RT-RG where it helps us
 - Share GCHQ's smart ideas to enhance RT-RG
 - Ability to implement some RT-RG features in our own systems?



Some challenges?

- **Interactive performance on GCHQ's desktop / web infrastructure**
 - Mapping data slow to load
 - GCOs not yet fully benefitting
- **Ensuring adequate legal and policy compliance**
 - US oversight & auditing
 - HRA
- **Analyst skills for understanding and exploiting VHF/UHF data**
- **Analyst mindset & CONOP**
 - Cross-organisational working (HQ, Digby, GCOs)



So what?!

What might RT-RG mean for me?

- **Ask yourself...**
 - **Are RT-RG concepts niche or mainstream?**
 - **Would I benefit from faster delivery / presentation of events/geo data?**
 - **Would I benefit from a real-time picture of targets' movements?**
 - **Could my customers benefit?**